

REMARKS

Claims 1-20 are now in the application. By this Amendment, claims 1, 4, 7-9, 11, 14, 17, and 20 have been amended. Support for the amendments is found at least at page 14, lines 28-29, of the specification. No new matter has been added.

Claims 1-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Buckley (US 2,636,898) in view of Uriarte et al. (Studies in Surface Science and Catalysis, 2000) and Fahey (J. Org. Chem., 1973).

Claims 1 and 20 recite a process for preparing a ketone comprising the reaction of 1,5,9-cyclododecatriene with dinitrogen monoxide to obtain cyclododecadienone. Claim 11 recites reacting 1,5,9-cyclododecatriene with dinitrogen monoxide to obtain cyclododecadienone. At least these features of the independent claims cannot reasonably be considered to have been suggested by the applied citations.

The Office Action acknowledges that Buckley fails to suggest a reaction of 1,5,9-cyclododecatriene. Instead, the Office Action relies on the suggestion of Buckley, at col. 2, lines 1-2, that “[a]lmost any unsaturated organic compound may be used.” The Office Action further relies on Buckley’s disclosure at col. 4, lines 17-18, of using cyclooctatetraene and hexatriene for a suggestion of oxidizing a cyclic compound having four sites of unsaturation and for a linear compound having three sites of unsaturation. As such, Buckley suffers from the deficiencies discussed at page 2, lines 23-24 of the specification that this citation fails to describe a cyclic compound with more than 8 carbon atoms or a cyclic compound having three sites of unsaturation. Thus, a person of ordinary skill in the art would not be able to assess from Buckley whether 1,5,9-cyclododecatriene is or is not one of almost any unsaturated compounds, whether one or two or three C-C double bonds are reacted to form a keto-group, and if only one C-C double bond is reacted, i.e., if cyclododecadienone is obtained, whether 1,5,9-cyclododecatriene is reacted to give cyclododeca-4,8-dienone, as recited in claims 8, 18, and 20.

The citations to Uriarte and Fahey fail to cure the deficiencies of Buckley. Fahey suggests the selective dehydrogenation of 1,5,9-cyclododecatriene to cyclododecene, i.e., a

compound with one C-C double bond. Fahey further suggests, at col. 1, lines 4-6, that cyclododecene is subsequently reacted to polyamide monomers. There is no indication that the method suggested in Fahey can be applied to a cyclododecadienone, as suggested in the Office Action. However, it would not be unreasonable for a skilled artisan to assume that cyclododecadienone would not react to cyclododecanone, as recited in claim 11, but instead to cyclododecenone, i.e., a cyclic ketone having one C-C double bond because Fahey suggests that the hydrogenation of 1,5,9-cyclododecatriene results in cyclododecene, i.e., a cyclic compound having one C-C double bond. As such, Fahey teaches away from the claimed subject matter because Fahey suggests that a compound having several C-C double bonds is reduced to a compound having one C-C double bond, whereas claim 11 recites cyclododecanone, i.e., a compound without a C-C double bond.

The Office Action applies Uriarte for allegedly suggesting that waste nitrous oxide form an adipic acid process can be used as an oxidizing agent. However, Uriarte is not applied in a manner to cure the deficiencies of Buckley and Fahey discussed above.

Further, a person of ordinary skill in the art would not have had a reasonable expectation of success that the applied references – even in combination – would yield a process for converting 1,5,9-cyclododecatriene with a high selectivity of 92% or more, as set forth in examples 1-3 on pages 23 and 24.

For at least the reasons set forth above, the Buckley, Uriarte, and Fahey, in any permissible combination, fail to suggest the combination of all of the features of independent claims 1, 11, and 20. Claims 2-10 and 12-19 are in condition for allowance for their respective dependence on allowable claims 1 and 11, as well as for the additional patentable features recited therein.

In view of the above amendment, applicants believe the pending application is in condition for allowance.

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Amendment dated June 26, 2008
Reply to Office Action of March 26, 2008

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Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13156-00044-US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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